## ABSTRACT OF THE DISCLOSURE

In an ink-jet printer in which a carrier is servo-controlled using an encoder, speed information at the start of movement is estimated to perform stable servo control without any influence of an incorrect speed owing to vibrations or the like at the start of movement. For this purpose, in servo-controlling the carrier by using a DC motor on the basis of position information obtained from the encoder, not a detected 10 speed obtained from the encoder, but an ideal speed or an estimated speed calculated by multiplying an ideal speed by a predetermined ratio is used as speed information for servo control of the carrier until the carrier moves in an arbitrary speed estimation region after the start of movement.

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